

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P271609

Luminaire Tested: **ISS-AF-1000-LED-E1-T4FT-7027-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271609  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29760)-DOWNLIGHT AND  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-1000-LED-E1-T4FT-7027-ULG  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV FORWARD THROW, WITH UPLIGHT GLOW  
Light Source: (16) 2700K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6369 lumens  
Efficiency: N/A  
Efficacy: 89.3 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U5 - G2  
  
Input Watts (W): 71.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

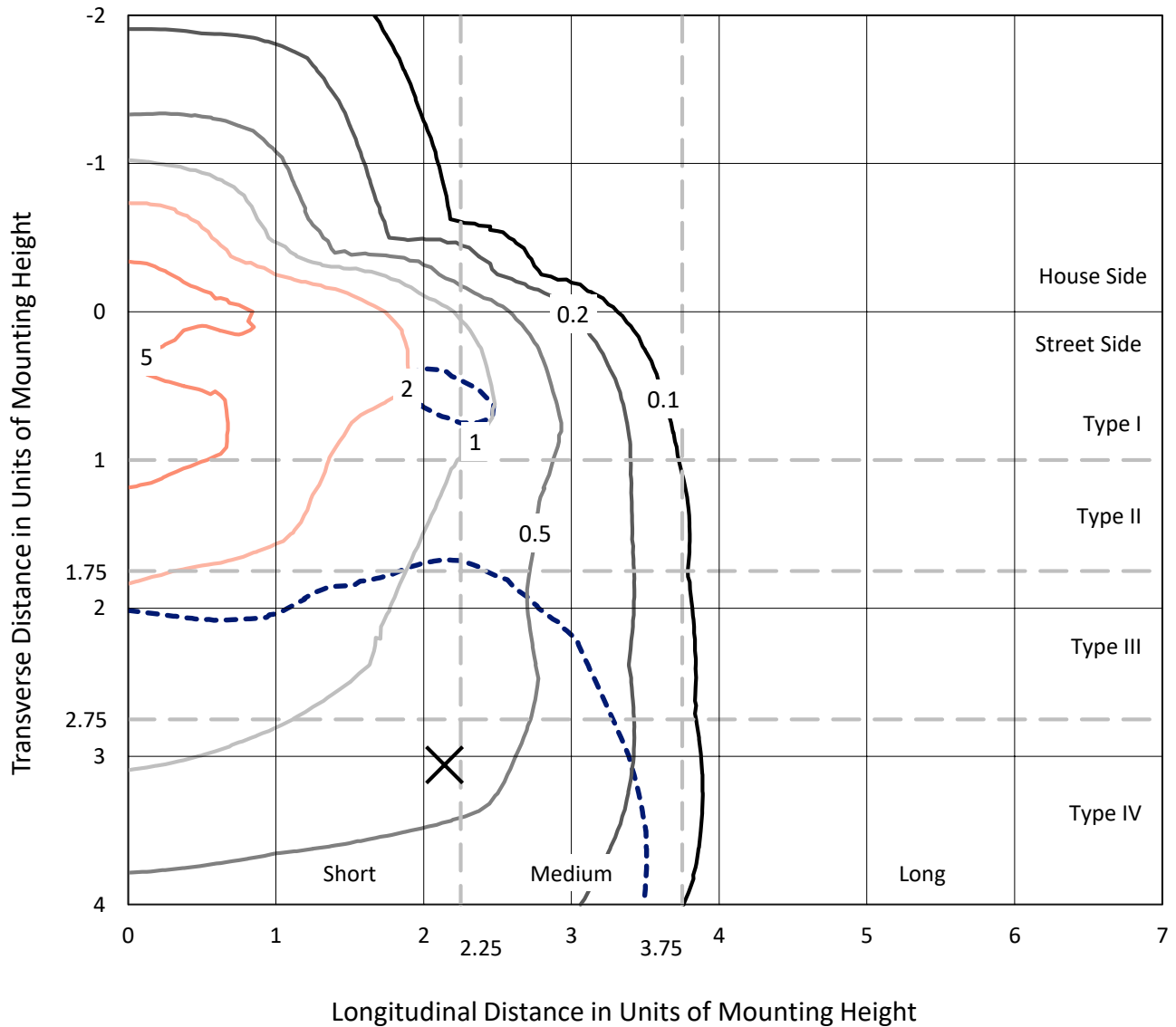


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

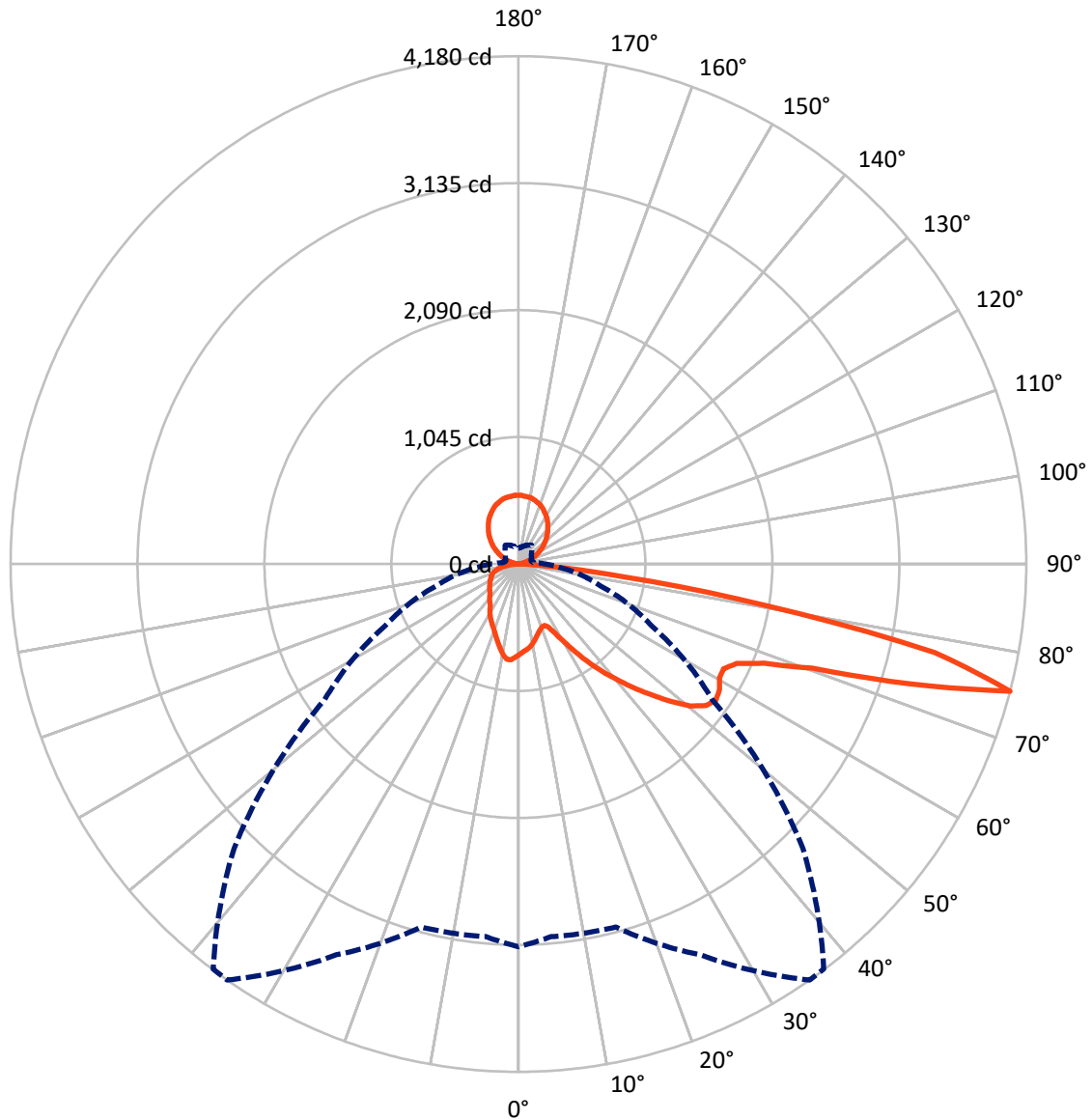


Based on 10 foot mounting height. Maximum calculated value = 7.6 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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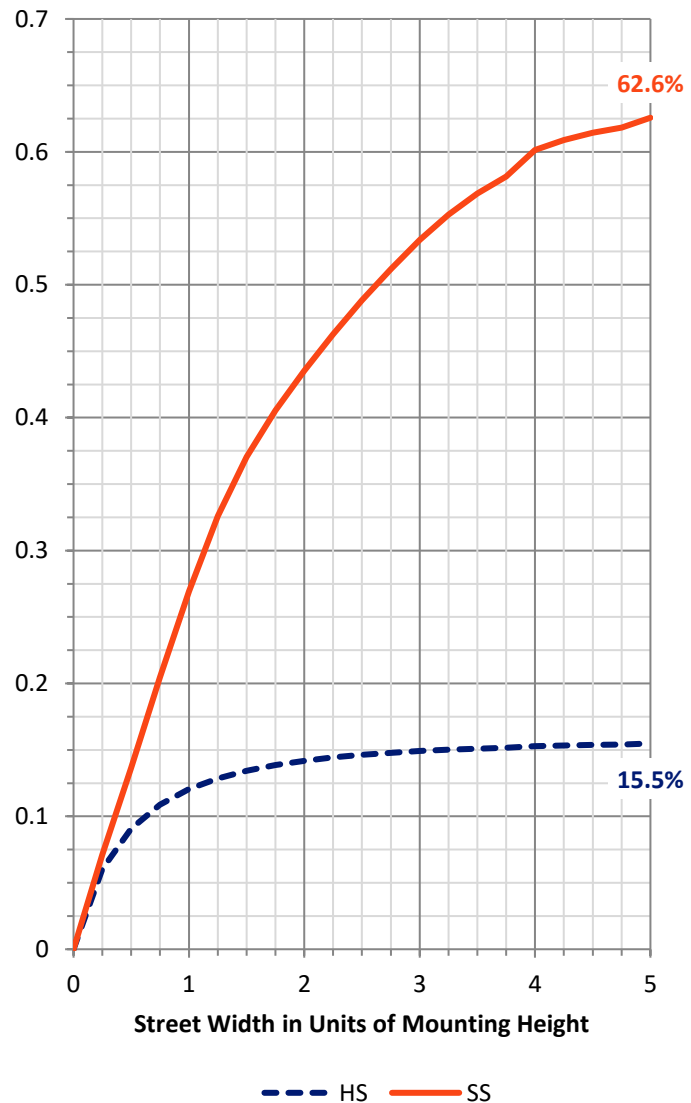
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	997.4	699.9	1697.2
	% Fixture	15.7	11.0	26.6
<b>Street Side</b>	Lumens	3971.9	699.9	4671.8
	% Fixture	62.4	11.0	73.4
<b>Total</b>	Lumens	4969.2	1399.8	6369.0
	% Fixture	78.0	22.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.1	1.1
10°-20°	184.9	2.9
20°-30°	292.6	4.6
30°-40°	472.2	7.4
40°-50°	698.6	11.0
50°-60°	898.3	14.1
60°-70°	1112.2	17.5
70°-80°	1120.8	17.6
80°-90°	119.7	1.9
90°-100°	4.7	0.1
100°-110°	67.7	1.1
110°-120°	150.2	2.4
120°-130°	219.7	3.4
130°-140°	260.7	4.1
140°-150°	264.3	4.1
150°-160°	226.8	3.6
160°-170°	152.2	2.4
170°-180°	53.3	0.8
0°-90°	4969.2	78.0
0°-180°	6369.0	100.0



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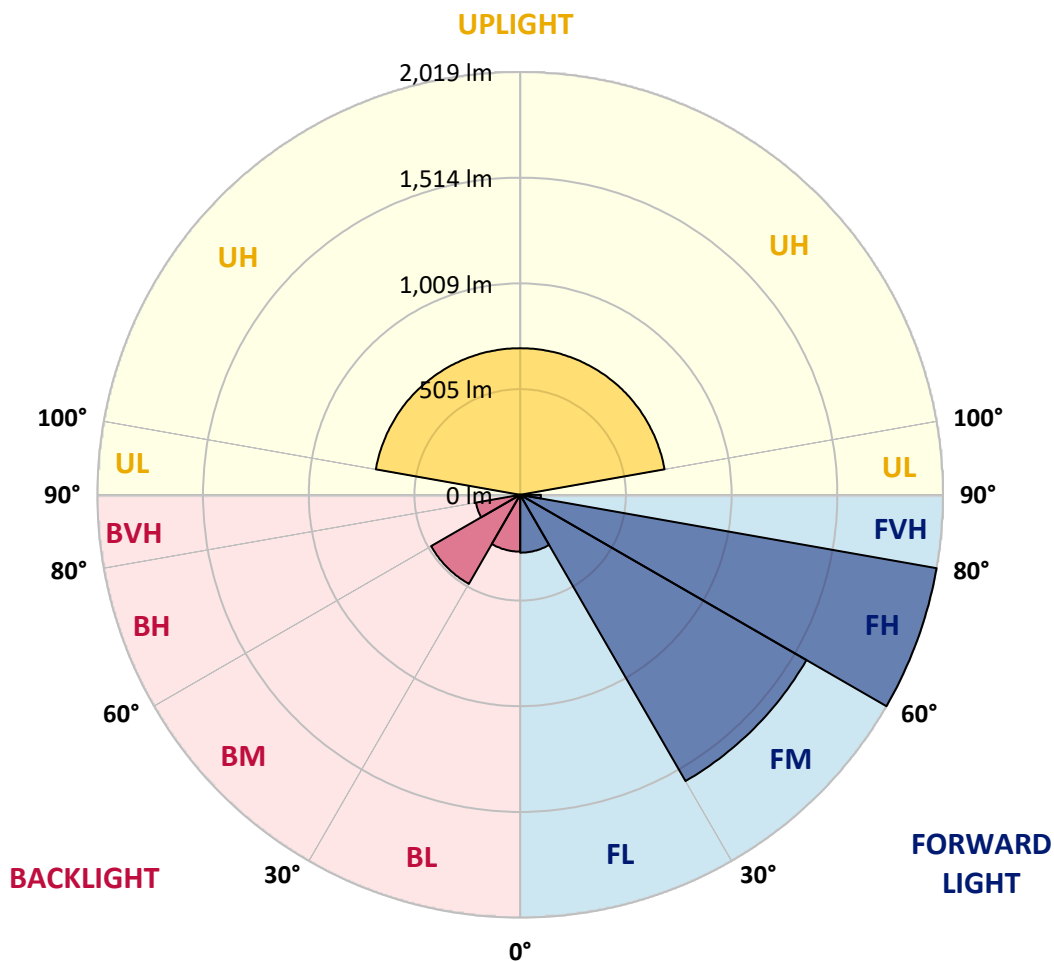
CATALOG NUMBER: ISS-AF-1000-LED-E1-T4FT-7027-ULG

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	276.3	4.3			
FM	(30°-60°)	1577.9	24.8			
FH	(60°-80°)	2018.7	31.7			G2/5000
FVH	(80°-90°)	99.0	1.6			G1/100
BL	(0°-30°)	271.3	4.3	B1/500		
BM	(30°-60°)	491.1	7.7	B1/1000		
BH	(60°-80°)	214.3	3.4	B1/500		G1/500
BVH	(80°-90°)	20.7	0.3			G1/100
UL	(90°-100°)	4.7	0.1		U1/10	
UH	(100°-180°)	699.9	11.0		U4/1000	

**BUG Rating: B1-U5-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	746.5	746.5	746.5	746.5	746.5	746.5	746.5	746.5	746.5	746.5	746.5
2.5°	724.9	723.2	721.6	721.6	724.9	724.9	726.5	728.3	730.0	734.9	741.6
5°	705.0	703.4	701.8	703.4	708.3	708.3	713.3	716.7	719.9	728.3	736.5
7.5°	678.5	678.5	676.9	683.5	688.4	686.8	693.4	696.7	705.0	713.3	726.5
10°	643.6	643.6	643.6	651.9	660.3	660.3	665.3	673.5	680.2	691.8	708.3
12.5°	613.8	612.1	612.1	618.8	628.7	630.4	638.7	650.4	658.5	673.5	691.8
15°	603.8	600.6	592.3	592.3	597.2	597.2	610.5	627.1	640.3	655.2	676.9
17.5°	605.5	600.6	579.0	572.3	572.3	573.9	587.2	605.5	622.1	640.3	668.6
20°	620.4	612.1	572.3	557.4	554.1	555.7	567.3	585.5	605.5	630.4	661.9
22.5°	685.1	671.8	597.2	564.0	549.1	549.1	555.7	575.6	600.6	633.8	673.5
25°	834.4	812.9	680.2	620.4	575.6	570.6	559.0	579.0	608.8	648.7	706.7
27.5°	987.1	965.5	783.1	718.4	648.7	633.8	590.5	595.6	628.7	681.8	756.5
30°	1114.8	1096.5	912.4	837.8	744.9	728.3	661.9	630.4	663.6	728.3	831.1
32.5°	1124.8	1116.4	1051.7	975.4	862.6	839.4	751.5	701.8	718.4	791.2	912.4
35°	1217.7	1210.9	1176.2	1103.2	990.3	963.8	871.0	794.6	789.6	860.9	1005.3
37.5°	1308.9	1300.6	1277.4	1227.5	1123.2	1101.5	1028.5	905.7	871.0	942.2	1096.5
40°	1395.2	1383.5	1353.7	1325.4	1249.1	1249.1	1171.2	1011.9	948.9	1013.6	1172.8
42.5°	1554.3	1517.9	1438.3	1416.6	1395.2	1395.2	1280.6	1085.0	1011.9	1091.6	1245.8
45°	1707.0	1672.1	1564.4	1521.2	1532.8	1526.2	1368.6	1126.4	1068.4	1164.6	1315.5
47.5°	1828.1	1796.6	1687.1	1657.2	1690.4	1663.9	1441.6	1159.6	1139.7	1242.5	1373.6
50°	1935.9	1861.3	1755.1	1794.9	1836.5	1791.6	1506.3	1209.4	1210.9	1325.4	1458.2
52.5°	1788.3	1780.0	1803.2	1896.1	1935.9	1886.2	1564.4	1272.4	1287.3	1431.6	1554.3
55°	1610.8	1609.1	1745.1	1926.0	1974.0	1927.7	1602.5	1348.6	1367.0	1562.7	1675.5
57.5°	1576.0	1559.4	1652.3	1862.9	1950.8	1917.7	1622.4	1420.0	1443.3	1728.6	1794.9
60°	1688.7	1657.2	1642.3	1794.9	1901.2	1884.6	1647.3	1504.6	1536.1	1917.7	1906.0
62.5°	1934.3	1891.1	1785.0	1799.9	1896.1	1882.8	1707.0	1604.1	1640.7	2106.9	1969.2
65°	2259.5	2227.9	2058.6	1937.6	1974.0	1955.8	1814.8	1730.2	1750.2	2242.9	1897.8
67.5°	2616.0	2572.9	2388.9	2222.9	2176.4	2141.6	1985.7	1879.5	1808.2	2222.9	1707.0
70°	3019.2	2972.7	2813.5	2642.6	2563.0	2524.9	2284.3	2008.9	1786.5	2004.0	1347.0
72.5°	3515.2	3452.2	3364.2	3382.5	3369.3	3263.0	2760.4	2052.1	1629.1	1491.4	804.5
75°	3150.3	3078.9	3093.9	3550.0	4180.4	4175.4	3311.2	1945.9	1214.3	703.4	348.4
77.5°	1129.7	1249.1	1843.1	2659.3	3505.3	3500.2	2563.0	1217.7	520.8	300.2	210.7
80°	283.7	288.6	457.9	1091.6	2047.1	2030.5	1453.2	459.6	217.3	182.4	144.3
82.5°	91.3	97.8	167.5	376.6	875.8	855.9	451.2	150.9	136.0	117.8	87.9
85°	29.8	29.8	59.6	129.4	288.6	277.0	91.3	54.8	74.6	61.4	39.9
87.5°	0.0	0.0	1.7	3.3	6.6	3.3	0.0	3.3	9.9	11.6	8.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	2.0	2.0	2.0	3.0	4.0	4.9	8.8	12.8	6.8	4.9	4.0
100°	7.8	7.8	9.8	13.7	21.6	23.2	29.5	31.4	29.5	26.5	25.5
102.5°	27.5	27.5	31.4	37.3	44.2	45.2	49.0	50.0	49.0	47.1	48.1
105°	53.0	53.0	55.0	59.8	64.8	65.6	68.7	69.7	69.7	67.7	69.7
107.5°	76.5	75.5	78.5	82.5	86.3	87.0	89.3	91.3	90.3	89.3	90.3
110°	99.2	100.1	101.1	104.0	108.0	108.3	110.0	111.9	111.9	110.9	111.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
112.5°	121.7	121.7	123.7	126.6	129.5	130.0	131.5	133.5	133.5	132.5	134.5
115°	143.3	144.3	146.2	148.2	151.2	151.5	153.1	155.0	155.0	155.0	157.0
117.5°	165.8	166.8	168.8	170.8	173.7	174.1	175.7	176.7	177.7	176.7	178.7
120°	189.5	191.4	192.3	194.3	197.3	197.4	198.3	200.2	200.2	200.2	202.2
122.5°	215.0	216.0	216.9	218.8	221.8	222.0	222.8	223.8	223.8	224.8	228.7
125°	239.5	241.5	242.5	243.4	246.3	246.6	247.3	248.3	249.3	249.3	252.2
127.5°	262.0	264.0	265.0	267.0	269.0	269.3	270.9	272.8	271.8	272.8	275.8
130°	284.7	286.6	287.5	288.5	292.5	292.7	293.5	295.5	295.5	296.4	299.3
132.5°	307.2	308.2	311.2	312.1	315.0	315.2	316.0	319.0	319.0	320.0	322.9
135°	329.8	330.8	332.7	334.7	338.6	338.6	338.6	341.5	341.5	342.5	344.5
137.5°	352.3	353.3	356.3	357.3	360.2	360.2	360.2	362.2	362.2	363.2	367.0
140°	375.0	375.9	377.8	378.8	380.8	381.0	381.8	382.8	382.8	384.7	388.7
142.5°	396.5	398.5	400.5	399.5	402.4	402.4	402.4	404.3	404.3	405.3	408.3
145°	417.2	418.1	420.0	420.0	423.0	423.2	424.0	426.0	425.0	426.0	428.9
147.5°	435.8	435.8	438.7	439.7	443.7	443.9	444.6	445.6	443.7	444.6	447.5
150°	452.5	453.5	455.4	456.4	460.3	460.5	461.3	462.3	460.3	460.3	464.2
152.5°	470.2	471.1	474.0	473.0	476.0	476.2	477.0	478.0	477.0	477.0	480.0
155°	489.8	490.7	492.7	491.7	493.7	493.7	493.7	494.7	493.7	494.7	497.6
157.5°	503.5	505.5	507.5	506.5	509.4	509.4	509.4	509.4	507.5	508.4	513.3
160°	515.3	517.2	519.2	519.2	522.2	522.2	522.2	522.2	520.2	520.2	523.2
162.5°	525.1	526.0	529.0	528.0	531.0	531.0	531.0	532.0	530.0	528.0	530.0
165°	535.9	536.8	538.8	537.8	541.8	541.8	541.8	542.8	539.8	537.8	539.8
167.5°	544.7	545.7	548.7	547.7	550.6	550.4	549.7	549.7	547.7	548.7	552.5
170°	551.6	552.5	555.5	554.5	556.5	556.3	555.5	554.5	553.5	555.5	560.5
172.5°	554.5	555.5	558.5	556.5	558.5	558.3	557.5	558.5	556.5	557.5	560.5
175°	556.5	558.5	559.5	558.5	561.4	561.4	561.4	562.4	559.5	557.5	560.5
177.5°	561.4	562.4	564.3	563.3	567.3	567.1	566.3	566.3	563.3	563.3	566.3
180°	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	746.5	746.5	746.5	746.5	746.5	746.5	746.5	746.5	746.5	746.5	746.5
2.5°	746.5	744.9	751.5	756.5	758.1	763.1	768.1	771.4	769.8	768.1	768.1
5°	744.9	746.5	758.1	768.1	776.3	784.7	791.2	794.6	792.9	792.9	792.9
7.5°	734.9	741.6	754.8	771.4	783.1	787.9	789.6	784.7	781.3	776.3	776.3
10°	718.4	728.3	749.8	768.1	773.0	766.4	756.5	746.5	733.3	724.9	724.9
12.5°	705.0	716.7	743.2	758.1	751.5	734.9	713.3	696.7	683.5	673.5	671.8
15°	693.4	708.3	736.5	739.8	724.9	696.7	668.6	650.4	635.3	628.7	628.7
17.5°	685.1	705.0	730.0	719.9	690.1	653.6	627.1	612.1	600.6	593.9	592.3
20°	686.8	711.6	723.2	695.1	651.9	613.8	588.9	580.7	572.3	569.0	569.0
22.5°	705.0	728.3	721.6	673.5	617.1	573.9	557.4	555.7	552.4	549.1	547.4
25°	744.9	761.4	726.5	651.9	580.7	537.5	529.2	534.1	532.5	529.2	529.2
27.5°	799.6	802.9	734.9	630.4	540.8	502.6	502.6	511.0	507.6	502.6	505.9
30°	866.0	847.7	738.1	595.6	494.3	469.5	474.5	479.4	476.1	469.5	469.5
32.5°	937.3	894.2	738.1	550.8	449.5	439.6	441.2	443.0	436.3	428.0	428.0
35°	1007.0	939.0	730.0	497.8	414.7	409.8	408.1	414.7	409.8	398.1	398.1
37.5°	1073.4	973.8	708.3	443.0	388.2	386.5	391.5	388.2	381.5	364.9	361.7
40°	1119.7	997.0	665.3	398.1	366.6	376.6	373.2	355.0	345.1	333.5	333.5
42.5°	1161.1	1008.5	612.1	363.4	351.7	364.9	351.7	328.5	315.1	313.5	315.1
45°	1199.3	1018.6	560.7	335.1	333.5	351.7	335.1	310.3	295.4	295.4	296.9
47.5°	1235.9	1028.5	509.2	308.6	311.9	331.7	321.9	296.9	282.0	272.1	272.1
50°	1294.0	1051.7	434.6	280.3	287.0	315.1	311.9	283.7	267.1	252.2	248.8
52.5°	1363.5	1091.6	353.3	250.4	268.8	300.2	300.2	272.1	253.8	233.9	230.5
55°	1456.5	1134.6	283.7	228.9	250.4	283.7	288.6	267.1	240.6	222.3	219.0
57.5°	1549.4	1149.7	228.9	207.4	227.3	267.1	280.3	257.2	225.7	212.3	210.7
60°	1614.2	1101.5	192.5	189.1	210.7	247.1	268.8	245.5	215.6	202.4	202.4
62.5°	1604.1	955.5	172.6	177.5	197.4	232.2	258.8	235.5	209.0	200.7	199.1
65°	1463.2	721.6	155.9	167.5	185.8	217.3	248.8	230.5	205.7	197.4	194.1
67.5°	1232.6	479.4	144.3	157.7	174.2	205.7	240.6	223.9	195.7	190.8	187.5
70°	892.5	280.3	132.7	147.6	162.5	192.5	228.9	210.7	184.2	180.8	172.6
72.5°	482.7	175.9	119.5	134.4	147.6	175.9	210.7	194.1	169.2	155.9	150.9
75°	220.6	127.6	106.2	119.5	129.4	154.3	189.1	170.9	150.9	134.4	131.1
77.5°	147.6	96.2	89.7	102.9	107.9	129.4	167.5	136.0	117.8	106.2	102.9
80°	101.1	71.3	73.0	84.6	82.9	102.9	126.1	109.5	93.0	96.2	87.9
82.5°	64.7	49.8	56.4	59.6	58.1	78.0	97.8	82.9	69.7	58.1	49.8
85°	28.2	26.5	33.1	34.9	34.9	43.1	51.5	41.5	31.5	23.3	23.3
87.5°	1.7	3.3	3.3	5.0	3.3	1.7	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	4.0	4.0	4.9	6.8	12.8	8.8	4.0	3.0	2.0	2.0	2.0
100°	24.5	25.5	26.5	29.5	31.4	29.5	21.6	13.7	9.8	7.8	7.8
102.5°	47.1	48.1	47.1	49.0	50.0	49.0	44.2	37.3	31.4	27.5	27.5
105°	67.7	69.7	67.7	69.7	69.7	68.7	64.8	59.8	55.0	53.0	53.0
107.5°	89.3	90.3	89.3	90.3	91.3	89.3	86.3	82.5	78.5	75.5	76.5
110°	110.9	111.9	110.9	111.9	111.9	110.0	108.0	104.0	101.1	100.1	99.2



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	132.5	134.5	132.5	133.5	133.5	131.5	129.5	126.6	123.7	121.7	121.7
115°	156.0	157.0	155.0	155.0	155.0	153.1	151.2	148.2	146.2	144.3	143.3
117.5°	176.7	178.7	176.7	177.7	176.7	175.7	173.7	170.8	168.8	166.8	165.8
120°	200.2	202.2	200.2	200.2	200.2	198.3	197.3	194.3	192.3	191.4	189.5
122.5°	227.7	228.7	224.8	223.8	223.8	222.8	221.8	218.8	216.9	216.0	215.0
125°	251.3	252.2	249.3	249.3	248.3	247.3	246.3	243.4	242.5	241.5	239.5
127.5°	272.8	275.8	272.8	271.8	272.8	270.9	269.0	267.0	265.0	264.0	262.0
130°	297.4	299.3	296.4	295.5	295.5	293.5	292.5	288.5	287.5	286.6	284.7
132.5°	321.0	322.9	320.0	319.0	319.0	316.0	315.0	312.1	311.2	308.2	307.2
135°	343.5	344.5	342.5	341.5	341.5	338.6	338.6	334.7	332.7	330.8	329.8
137.5°	365.1	367.0	363.2	362.2	362.2	360.2	360.2	357.3	356.3	353.3	352.3
140°	386.7	388.7	384.7	382.8	382.8	381.8	380.8	378.8	377.8	375.9	375.0
142.5°	407.3	408.3	405.3	404.3	404.3	402.4	402.4	399.5	400.5	398.5	396.5
145°	427.0	428.9	426.0	425.0	426.0	424.0	423.0	420.0	420.0	418.1	417.2
147.5°	444.6	447.5	444.6	443.7	445.6	444.6	443.7	439.7	438.7	435.8	435.8
150°	461.3	464.2	460.3	460.3	462.3	461.3	460.3	456.4	455.4	453.5	452.5
152.5°	477.0	480.0	477.0	477.0	478.0	477.0	476.0	473.0	474.0	471.1	470.2
155°	495.7	497.6	494.7	493.7	494.7	493.7	493.7	491.7	492.7	490.7	489.8
157.5°	510.3	513.3	508.4	507.5	509.4	509.4	509.4	506.5	507.5	505.5	503.5
160°	521.2	523.2	520.2	520.2	522.2	522.2	522.2	519.2	519.2	517.2	515.3
162.5°	527.0	530.0	528.0	530.0	532.0	531.0	531.0	528.0	529.0	526.0	525.1
165°	537.8	539.8	537.8	539.8	542.8	541.8	541.8	537.8	538.8	536.8	535.9
167.5°	550.6	552.5	548.7	547.7	549.7	549.7	550.6	547.7	548.7	545.7	544.7
170°	558.5	560.5	555.5	553.5	554.5	555.5	556.5	554.5	555.5	552.5	551.6
172.5°	557.5	560.5	557.5	556.5	558.5	557.5	558.5	556.5	558.5	555.5	554.5
175°	557.5	560.5	557.5	559.5	562.4	561.4	561.4	558.5	559.5	558.5	556.5
177.5°	563.3	566.3	563.3	563.3	566.3	566.3	567.3	563.3	564.3	562.4	561.4
180°	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3	565.3

(END OF REPORT)